			if necessary)  U.S. PA	
PATENT AND TRADE  (C) Examination Disclosure Statement (Use several sheets if necessary)  U.S.  *EXAMINATION DISCLOSURE STATEMENT (Use several sheets if necessary)  U.S.  *EXAMINATION DOCUMENT NUMBER DATE (INITIAL DOCUMENT NUMBER DATE (INITIAL DATE (INIT				
### PATENT AND TRA  #### PATENT AND TRA  **EXAMINATION DISCLOSURE STATEM  **Use several sheets if necessary)  **EXAMINATION DOCUMENT NUMBER   DATE    NITIAL   DOCUMENT NUMBER   DATE    AA   5,296,716   03/22/94    AB   5,687,112   11/11/97    AC   5,761,115   06/02/98				
EXAMINE	18.73	DOCUMENT NUMBER	DATE	
MH	AA	5,296,716	03/22/94	Ov
	AB	5,687,112	U.S. PATE  OCUMENT NUMBER  03/22/94  04/87,112  06/02/98  CON DISCLOSURE STATEMENT  U.S. PATE  07/87,112  08/98  09/98  09/98  09/98  09/98  09/98  09/98	
*EXAMINE VITA DOCUMENTIAL AA 5,296  AB 5,686  AC 5,766	5,761,115	06/02/98	Ko	
	AD	5,869,843	02/09/99	Ha

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO. 500993.01

APPLICATION NO. 10/081,594

APPLICANT(S)

Terry L. Gilton

- 1UH 1	7 200	(Use several sheets if no		<del>i-</del>	February 20, 200	2	GROUP ART UNIT C	Meliur	
			U.S.	PATENT	DOCUMENTS				
XAMINE VI	18 13	DOCUMENT NUMBER	DATE		NAME	CLA	SS SUBCLASS	FILING IF APPRO	
4	AA	5,296,716	03/22/94	Ovshinsk	y et al.	257	3		
	AB	5,687,112	11/11/97	Ovshinsk	y	365	163		
ŀ	AC	5,761,115	06/02/98	Kozicki e	t al.	365	182		
	AD	5,869,843	02/09/99	Harshfield	i	257	5		
	AE	5,896,312	04/20/99	Kozicki e	t al.	365	153		
	AF	5,912,839	06/15/99	Ovshinsk	y et al.	365	185.03		
	AG	5,914,893	06/22/99	Kozicki e	t al.	365	107		
	AH	6,084,796	07/04/00	Kozicki e	t al.	365	153		
1	AI	6,150,253	11/21/00	Doan et a	l.	438	597		
	AJ								
		The second secon	FORE	GN PATEN	NT DOCUMENTS				
		DOCUMENT NUMBER	DATE		COUNTRY	CLA	SS SUBCLASS	TRANSI	LATIO
								YES	NC
	AK								
	AL								
	AM								
	AN								
	АО								
, , ,		ОТН	ER PRIOR A	RT (Including	Author, Title, Date, Perting	ini Pages, Eic.	)		
	AP								
	AQ								
	AR								

\* EXAMINER:

Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).



# 10 8/1/03

PTO/SB/08A (10-01)
Approved for use through 10/31/2002.OMB 0651-0031
U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE cond to a collection of information unless it contains a valid OMB control number.

Sub	stitute for form 1449A/PTO		Complete if Known		
			Application Number	10/081,594	
		DISCLOSURE	Filing Date	February 20, 2002	
S	STATEMENT	BY APPLICANT	First Named Inventor	Terry L. Gilton	
	(use as many sh	eets as necessary)	Art Unit	2818	
	(acc ac many on	00.0 00	Examiner Name	Not Yet Assigned	
Sheet	1	8	Attorney Docket Number	M4065.0627/P627	

			U.S. PA	TENT DOCUMENTS	
Examiner	Cite	Document Number	Publication Date	Name of Patentee or Applicant	Pages, Columns, Lines, Where Relevant
Initials*	No.1	Number-Kind Code <sup>2</sup> (if known)	MM-DD-YYYY	of Cited Document	Passages or Relevant Figures Appear
MX	AA	US 2002/0168820	11/14/2002	Kozicki et al.	/
7	ΑB	6,469,364	10/22/2002	Kozicki	
	AC	6,388,324	05/14/2002	Kozicki et al.	
	AD	US 2002/0000666	01/03/2002	Kozicki et al.	
	AE	5,500,532	03/19/1996	Kozicki et al.	
1	AF	6,418,049	07/09/2002	Kozicki et al.	
1	AG	5,751,012	05/12/1998	Wolstenholme et al.	
	AH	5,789,277	08/04/1998	Zahorik et al.	
	ΑI	6,348,365	02/19/2202	Moore et al.	
7	AJ	6,388,324	05/14/2002	Kozicki et al.	
7	AK	US 2002/0000666	01/03/2002	Kozicki et al.	
	AL				
	AM				
	ΑN				
	AO				1

Г			FOREI	GN PATENT	DOCUMENTS		
_	xaminer	Cite No.1	Foreign Patent Document  Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>®</sup>
	MIK	BA	WO 02/21542	03/14/2002	Kozicki et al.		
ľ	1 at	BB	WO 00/48196	08/17/2000	Kozicki et al.		
Г		BC	WO 97/48032	12/18/1997	Kozicki et al.	$\overline{}$	
Г		BD .	WO 99/28914	06/10/1999	Kozicki et al.		

Examiner Signature	1 milliano	Date Considered	08/03	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant

75 FEB 28 700 MED 760 MED 760

<sup>&</sup>lt;sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See attached Kinds Codes of USPTO Patent Documents at <a href="www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the application number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.



Sut	bstitute for form 1449B/PTC			Complete if Known		
ou.				Application Number	10/081,594	
١N	<b>NFORMATION</b>	N DI	SCLOSURE	Filing Date	February 20, 2002	
S	TATEMENT	BY A	APPLICANT	First Named Inventor	Terry L. Gilton	
				Group Art Unit	2818	
	(use as many sh	eets as	necessary)	Examiner Name	Not Yet Assigned	
heet	2	of	8	Attorney Docket Number	M4065.0627/P627	

	T	OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the	1
Examiner nitials	Cite No.1	include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
MX	CA	Abdel-All, A.; Elshafie,A.; Elhawary, M.M., DC electric-field effect in bulk and thin-film Ge5As38Te57 chalcogenide glass, Vacuum 59 (2000) 845-853.	
1	СВ	Adler, D.; Moss, S.C., Amorphous memories and bistable switches, J. Vac. Sci. Technol. 9 (1972) 1182-1189.	
	СС	Adler, D.; Henisch, H.K.; Mott, S.N., The mechanism of threshold switching in amorphous alloys, Rev. Mod. Phys. 50 (1978) 209-220.	
	CD	Afifi, M.A.; Labib, H.H.; El-Fazary, M.H.; Fadel, M., Electrical and thermal properties of chalcogenide glass system Se75Ge25-xSbx, Appl. Phys. A 55 (1992) 167-169.	
	CE	Afifi,M.A.; Labib, H.H.; Fouad, S.S.; El-Shazly, A.A., Electrical & thermal conductivity of the amorphous semiconductor GexSe1-x, Egypt, J. Phys. 17 (1986) 335-342.	
	CF	Alekperova, Sh.M.; Gadzhieva, G.S., Current-Voltage characteristics of Ag2Se single crystal near the phase transition, Inorganic Materials 23 (1987) 137-139.	
	CG	Aleksiejunas, A.; Cesnys, A., Switching phenomenon and memory effect in thin-film heterojunction of polycrystalline selenium-silver selenide, Phys. Stat. Sol. (a) 19 (1973) K169-K171.	
1	СН	Angell, C.A., Mobile ions in amorphous solids, Annu. Rev. Phys. Chem. 43 (1992) 693-717.	T
	CI	Aniya, M., Average electronegativity, medium-range-order, and ionic conductivity in superionic glasses, Solid state lonics 136-137 (2000) 1085-1089.	
	Cl	Asahara, Y.; Izumitani, T., Voltage controlled switching in Cu-As-Se compositions, J. Non-Cryst. Solids 11 (1972) 97-104.	
	СК	Asokan, S.; Prasad, M.V.N.; Parthasarathy, G.; Gopal, E.S.R., Mechanical and chemical thresholds in IV-VI chalcogenide glasses, Phys. Rev. Lett. 62 (1989) 808-810	
	CL	Baranovskii, S.D.; Cordes, H., On the conduction mechanism in ionic glasses, J. Chem. Phys. 111 (1999) 7546-7557.	
	СМ	Belin, R.; Taillades, G.; Pradel, A.; Ribes, M., Ion dynamics in superionic chalcogenide glasses: complete conductivity spectra, Solid state Ionics 136-137 (2000) 1025-1029.	
	CN	Belin, R.; Zerouale, A.; Pradel, A.; Ribes, M., Ion dynamics in the argyrodite compound Ag7GeSe5I: non-Arrhenius behavior and complete conductivity spectra, Solid State Ionics 143 (2001) 445-455.	
	со	Benmore, C.J.; Salmon, P.S., Structure of fast ion conducting and semiconducting glassy chalcogenide alloys, Phys. Rev. Lett. 73 (1994) 264-267.	
	СР	Bernede, J.C., Influence du metal des electrodes sur les caracteristiques courant-tension des structures M-Ag2Se-M, Thin solid films 70 (1980) L1-L4.	
\\.	CQ	Bernede, J.C., Polarized memory switching in MIS thin films, Thin Solid Films 81 (1981) 155-160.	
	CR	Bernede, J.C., Switching and silver movements in Ag2Se thin films, Phys. Stat. Sol. (a) 57 (1980) K101-K104.	
	cs	Bernede, J.C.; Abachi, T., Differential negative resistance in metal/insulator/metal structures with an upper bilayer electrode, Thin solid films 131 (1985) L61-L64.	
	СТ	Bernede, J.C.; Conan, A.; Fousenan't, E.; El Bouchairi, B.; Goureaux, G., Polarized memory switching effects in Ag2Se/Se/M thin film sandwiches, Thin solid films 97 (1982) 165-171.	
	CU	Bernede, J.C.; Khelil, A.; Kettaf, M.; Conan, A., Transition from S- to N-type differential negative resistance in Al-Al2O3-Ag2-xSe1+x thin film structures, Phys. Stat. Sol. (a) 74 (1982) 217-224.	
	CV	Bondarev, V.N.; Pikhitsa, P.V., A dendrite model of current instability in RbAg4l5, Solid State lonics 70/71 (1994) 72-76.	
	CW	Boolchand, P., The maximum in glass transition temperature (Tg) near x=1/3 in GexSe1-x	Π

Sı	ubstitute for form 1449B/PTC	)			Complete if Known
				Application Number	10/081,594
	NFORMATION	N DI	SCLOSURE	Filing Date	February 20, 2002
	STATEMENT	BY A	APPLICANT	First Named Inventor	Terry L. Gilton
				Group Art Unit	2818
	(use as many sh	eets as	necessary)	Examiner Name	Not Yet Assigned
Sheet	3	of	8	Attorney Docket Number	M4065.0627/P627

Sheet		3	of	8	Attorney Docket Number	M4065.0627/P627					
1	1	Glasses A	sian J	ournal of Physics (2000	0) 9, 709-72.						
-+	сх	Nature 410 (2001) 1070-1073.									
- 1		Nature 410 (2001) 1070-1073.									
7	CY	Boolchand, P.; Georgiev, D.G.; Goodman, B., Discovery of the Intermediate Phase in									
l_		Chalcogenide Glasses, J. Optoelectronics and Advanced Materials, 3 (2001), 703									
	CZ					resser, W.J., Onset of rigidity in					
						Amorphous Materials, M.F.					
	<u> </u>					Netherlands, 2001, pp. 97-132.					
1	CA1					ring of evaporated amorphous					
- 1		1		by films: role of therma	annealing, Diffusion	and Defect Data Vol. 53-54					
+	OD4	(1987) 415		andhaus I. Dannan M	La Caranti D. Chrant	hund a visits of bushon abanciad					
	CB1					tural origin of broken chemical					
	CC1			glass, Phys. Rev. B 25		der and phase separation in					
ı	ICCI			es, Solid state comm. 4		der and phase separation in					
-	CD1					ansition temperature (Tg),	_				
- 1	1001					on in chalcogenides, Dept. of					
1				ncinnati (October 28, 1							
	CE1	Boolchand	. P.: G	rothaus, J. Molecular S	tructure of Melt-Quen	ched GeSe2 and GeS2 glasses					
-1		compared,	Proc.	Int. Conf. Phys. Semice	ond. (Eds. Chadi and	Harrison) 17 <sup>th</sup> (1985) 833-36.					
	CF1					nd molecular clustering in					
				Phys. Rev. Lett. 56 (19							
	CG1					trinsically broken chalcogen					
	_					42 (1981) C4-193-C4-196.					
1	CH1					lolecular phase separation and					
-				Se2 glass, Hyperfine li							
l	CI1					K.; Jakubowicz, A., Room-					
- 1	1	258 (1992)			tion of stable devices i	in CulnSe2 Crystals, Science					
	CJ1				Current-controlled no	egative-resistance behavior and	—				
- 1	1001					Phys. 27 (1994) 2624-2627.					
	CK1	Chen. C.H	.: Tai.	K.L. Whisker growth in	nduced by Aa photodo	pping in glassy GexSe1-x films,					
- 1	10			37 (1980) 1075-1077.		, pg g.a.co, coco,					
	CL1			, J., Role of nitrogen in	the crystallization of s	ilicon nitride-doped					
_ 1		chalcogeni	ide gla	sses, J. Am. Ceram. So	oc. 82 (1999) 2934-29	36.					
	CM1					urability of chalcogenide glass,					
		J. Non-Cry	st. So	ids 220 (1997) 249-253	3.						
}	CN1					nous semiconductor memory					
	-	device, J. I	Non-C	ryst. Solids 8-10 (1972)	885-891.						
{	CO1					can, L., Ohmic and non-ohmic					
_	CP1					. Solids 8-10 (1972) 781-786. eta-Ag2Se from 4.2 to 300K, J.					
- 1	CPT			967) 753-756.	or beta-Agzire and be	eta-Ag2Se from 4.2 to 300K, J.					
	CQ1	Davis F A	Sem	iconductors without for	m Search 1 (1970) 15	52-155					
-+	CR1	Dearnaley	G·S	toneham A M · Morgar	D.V Flectrical phen	nomena in amorphous oxide	_				
Ì	0			Phys. 33 (1970) 1129-		ioniona in amorphous oxide					
_	CS1	Deius R I	: Susr	nan. S.: Volin. K.J.: Mo	ntague, D.G.: Price D	.L., Structure of Vitreous Ag-Ge-					
1	1.0			Solids 143 (1992) 162							
	CT1	den Boer.	W., Th	reshold switching in ทั้ง	drogenated amorphou	is silicon, Appl. Phys. Lett. 40					
{		(1982) 812	-813.		4		_				
	CU1	Drusedau.	T.P.; I	Panckow, A.N.; Klabun	de, F., The hydrogena	ted amorphous					



Su	bstitute for form 1449B/PT	0		Complete if Known		
- Ou	bouldto for form 1440D/1	Ü		Application Number	10/081,594	
11	<b>NFORMATIO</b>	N DIS	CLOSURE	Filing Date	February 20, 2002	
S	STATEMENT	BY A	PPLICANT	First Named Inventor	Terry L. Gilton	
				Group Art Unit	2818	
	(use as many s	heets as n	ecessary)	Examiner Name	Not Yet Assigned	
Sheet	4	of	8	Attorney Docket Number	M4065.0627/P627	

Sheet		4	of	8		Attorney Docket Number M4	1065.0627/P627			
MH		Crvst. Soli	ds 198-2	200 (1996) 82	9-832.	em-Films of unique electr				
	CV1	El Bouchairi, B.; Bernede, J.C.; Burgaud, P., Properties of Ag2-xSe1+x/n-Si diodes, Thin Solid Films 110 (1983) 107-113.								
	CW1					Role of photoinduced de 155 (1993) 171-179.	fects in amorphous GexSe1-			
	CX1	El Ghrand	i, R.; Ca	las, J.; Galibe	ert, G.; A	verous, M., Silver photodis 218 (1992)259-273.	ssolution in amorphous			
	CY1	El Ghrand	i, R.; Ca	las, J.; Galibe	rt, G., A	g dissolution kinetics in an vs time, Phys. Stat. Sol. (a	morphous GeSe5.5 thin films a) 123 (1991) 451-460.			
	CZ1		L., The	threshold swi		semiconducting glass Ge				
	CA2	Elliott, S.R	., A unif			tal photodissolution in am	norphous chalcogenide			
	CB2	Elliott, S.R	., Photo	dissolution of 137-138 (199	metals i	n chalcogenide glasses: /	A unified mechanism, J.			
	CC2	Elsamano	udy, M.N	И.; Hegab, N./	A.; Fade	, M., Conduction mechan i, Vacuum 46 (1995) 701-				
	CD2	El-Zahed,	H.; El-K	orashy, A., In	fluence d	of composition on the elects 376 (2000) 236-240.	ctrical and optical properties			
	CE2	Fadel, M.,	Switchi	ng phenomen s, Vacuum 44	on in eva	aporated Se-Ge-As thin fil	lms of amorphous			
	CF2		El-Shai	r, H.T., Electri			s of Se75Ge7Sb18, Vacuum			
	CG2	Feng, X.; Bresser, W.J.; Boolchand, P., Direct evidence for stiffness threshold in Chalcogenide glasses, Phys. Rev. Lett. 78 (1997) 4422-4425.								
	CH2	Feng, X.; Bresser, W.J.; Zhang, M.; Goodman, B.; Boolchand, P., Role of network connectivity on the elastic, plastic and thermal behavior of covalent glasses, J. Non-Cryst. Solids 222 (1997) 137-143.								
	CI2	Fischer-Co	olbrie, A			oss, P.H.; Marcus, M.A., S n films, Phys. Rev. B 38 (				
	CJ2	Fleury, G.;	; Hamou		; Vautie	, C., Conductivity and cry	stallization of amorphous			
	CK2		H, Optic	al and electric			miconductors, J. Non-Cryst.			
	CL2	Fritzsche,	H., Élec			amorphous semiconductor	rs, Annual Review of			
	CM2	Gates, B.;	Wu, Y.; ed by ter	Yin, Y.; Yang	, P.; Xia	Y., Single-crystalline nan vires of trigonal Se, J. Am	nowires of Ag2Se can be n. Chem. Soc. (2001)			
	CN2	Gosain, D	.P.; Nak ble phas				Nonvolatile memory based p. J. Appl. Phys. 28 (1989)			
	CO2	Guin, JP. of Ge-Se of Cryst. Soli	.; Rouxe chalcoge ds 298 (	enide glasses (2002) 260-26	below T	g: elastic recovery and no	Lucas, J., Indentation creep on-Newtonian flow, J. Non-			
	CP2	Guin, JP.	.; Rouxe	I, T.; Sangleb	oeuf, J	C; Melscoet, I.; Lucas, J., alcogenide glasses, J. An	Hardness, toughness, and m. Ceram. Soc. 85 (2002)			
	CQ2			ectrical switch ) 148-154.	ning and	memory effects in amorpl	hous chalcogenides, J. Non-			

Su	bstitute for form 1449B/	PTO		Complete if Known		
, ,,,				Application Number	10/081,594	
l IN	NFORMATIO	ID NC	SCLOSURE	Filing Date	February 20, 2002	
l s	TATEMENT	ΓBY A	APPLICANT	First Named Inventor	Terry L. Gilton	
				Group Art Unit	2818	
·	(use as many	sheets as	necessary)	Examiner Name	Not Yet Assigned	
Sheet	5	of	8	Attorney Docket Number	M4065.0627/P627	

Silect		<del></del>	<u> </u>		Atterney Becket Hum	1014000:002771 027				
NH	CR2				ew experiments on the cha lon-Cryst. Solids 8-10 (19	arge-controlled switching effect in 72) 408-414.				
1	CS2	Haifz, M.M and electric	.; Ibrah cal pro	nim, M.M.; Dong perties of As-So	gol, M.; Hammad, F.H., Et e-Cu glasses, J. Apply. Pt	fect of composition on the structure nys. 54 (1983) 1950-1954.				
	CT2	effects in m	Hajto, J.; Rose, M.J.; Osborne, I.S.; Snell, A.J.; Le Comber, P.G.; Owen, A.E., Quantization effects in metal/a-Si:H/metal devices, Int. J. Electronics 73 (1992) 911-913.							
	CU2	Hajto, J.; Hu, J.; Snell, A.J.; Turvey, K.; Rose, M., DC and AC measurements on metal/a-Si:H/metal room temperature quantised resistance devices, J. Non-Cryst. Solids 266-269 (2000) 1058-1061.								
	CV2	resistance (1996) 825	effects -828.	in metal-a-Si:l	-metal thin film structures	oom temperature quantized s, J. Non-Cryst. Solids 198-200				
	CW2					M.J., Analogue memory and tres, Phil. Mag. B 63 (1991) 349-				
	CX2	Japan. J. A	ppl. P	hys. <u>13 (1974)</u>	1163-1164.	ory switching in amorphous Se film,				
	CY2	chalcogeni	de ser	niconductors, V	K., Memory switching ph acuum 45 (1994) 459-462	2				
		<ul> <li>CZ2 Hirose, Y.; Hirose, H., Polarity-dependent memory switching and behavior of Ag dendrite i Ag-photodoped amorphous As2S3 films, J. Appl. Phys. 47 (1976) 2767-2772.</li> <li>CA3 Hong, K.S.; Speyer, R.F., Switching behavior in II-IV-V2 amorphous semiconductor system J. Non-Cryst. Solids 116 (1990) 191-200.</li> </ul>								
		CB3 Hosokawa, S., Atomic and electronic structures of glassy GexSe1-x around the stiffr threshold composition, J. Optoelectronics and Advanced Materials 3 (2001) 199-214								
	devices, J.			ryst. Solids 22	7-230 (1998) 1187-1191.	forming in Cr/p+a-/Si:H/V thin film				
	CD3	non-metal (1996) 37-	transiti 50.	on in Cr-hydrog	genated amorphous Si-V t	citance anomaly near the metal- hin-film devices, Phil. Mag. B. 74				
	CE3	devices, Pl	hil. Ma	g. B 80 (2000)	29-43.	instability in Cr-p+a-Si:H-V thin film				
	CF3				Tanaka, K., Electrical and Ge, Solid State Comm. 8 (					
	CG3	amorphous	films	of Ge2S3, J. No	on-Cryst. Solids 35 & 36 (					
	СНЗ	lyetomi, H. clustering	; Vash of Ag a	ishta, P.; Kalia, toms, J. Non-C	R.K., Incipient phase sep ryst. Solids 262 (2000) 13	aration in Ag/Ge/Se glasses: 35-142.				
	CI3	Jones, G.; Solid Films	Collins 40 (19	s, R.A., Switchir 977) L15-L18.	ng properties of thin selen	ium films under pulsed bias, Thin				
	CJ3	switching,	Phys. 3	Stat. Sol. (a) 13	(1972) K105-K109.	n of amorphous As2Se7 before				
	СКЗ	Joullie, A.N Bull. 8 (197	/l.; Mar	ucchi, J., Elect	rical properties of the amo	orphous alloy As2Se5, Mat. Res.				
	CL3	Kaplan, T.; Solids 8-10	Adler, (1972	D., Electrother 2) 538-543.	- Miller	us semiconductors, J. Non-Cryst.				
	СМЗ	Kawaguchi amorphous	i, T.; M s Ag-G	aruno, S.; Ellio e-S and Ag-Ge		and structural properties of of photoinduced and thermally 996) 9096-9104.				
	CN3	Kawaguchi	, T.; M	asui, K., Analys		nsmission spectra resulting from Ag				
						· · · · · · · · · · · · · · · · · · ·				

Citaci dic i aportioni i todocaci i ici ai i i i i portioni a i i i i i i i i i i i i i i i i i i						
Sub	stitute for form 1449B/PTC			Complete if Known		
Jub	sudic for form 1440B/1 10			Application Number	10/081,594	
IN	<b>IFORMATION</b>	N DI	SCLOSURE	Filing Date	February 20, 2002	
S	TATEMENT I	BY A	APPLICANT	First Named Inventor	Terry L. Gilton	
				Group Art Unit	2818	
	(use as many sh	eets as	necessary)	Examiner Name	Not Yet Assigned	
Sheet	6	of	8	Attorney Docket Number	M4065.0627/P627	

UH	CO3	Kawasaki, M.; Kawamura, J.; Nakamura, Y.; Aniya, M., Ionic conductivity of Agx(GeSe3)1-x (0<=x<=0.571) glasses, Solid state Ionics 123 (1999) 259-269.							
	CP3	Kluge, G.; Thomas, A.; Klabes, R.; Grotzschel, R., Silver photodiffusion in amorphous GexSe100-x, J. Non-Cryst. Solids 124 (1990) 186-193.							
	CQ3	Kolobov, A.V., On the origin of p-type conductivity in amorphous chalcogenides, J. Non-Cryst. Solids 198-200 (1996) 728-731.							
	CR3	Kolobov, A.V., Lateral diffusion of silver in vitreous chalcogenide films, J. Non-Cryst. Solids 137-138 (1991) 1027-1030.							
	CS3	Korkinova, Ts.N.; Andreichin,R.E., Chalcogenide glass polarization and the type of contacts, J. Non-Cryst. Solids 194 (1996) 256-259.							
	СТЗ	Kotkata, M.F.; Afif, M.A.; Labib, H.H.; Hegab, N.A.; Abdel-Aziz, M.M., Memory switching in amorphous GeSeTl chalcogenide semiconductor films, Thin Solid Films 240 (1994) 143-146.							
	CU3	Lakshminarayan, K.N.; Srivastava, K.K.; Panwar, O.S.; Dumar, A., Amorphous semiconductor devices: memory and switching mechanism, J. Instn Electronics & Telecom. Engrs 27 (1981) 16-19.							
	CV3	Lal, M.; Goyal, N., Chemical bond approach to study the memory and threshold switching chalcogenide glasses, Indian Journal of pure & appl. phys. 29 (1991) 303-304.							
	CW3	Leimer, F.; Stotzel, H.; Kottwitz, A., Isothermal electrical polarisation of amorphous GeSe films with blocking Al contacts influenced by Poole-Frenkel conduction, Phys. Stat. Sol. (a) 29 (1975) K129-K132.							
	СХЗ	Leung, W.; Cheung, N.; Neureuther, A.R., Photoinduced diffusion of Ag in GexSe1-x glass, Appl. Phys. Lett. 46 (1985) 543-545.							
	CY3	Matsushita, T.; Yamagami, T.; Okuda, M., Polarized memory effect observed on Se-SnO2 system, Jap. J. Appl. Phys. 11 (1972) 1657-1662.							
	CZ3	Matsushita, T.; Yamagami, T.; Okuda, M., Polarized memory effect observed on amorphous selenium thin films, Jpn. J. Appl. Phys. 11 (1972) 606.							
	CA4	Mazurier, F.; Levy, M.; Souquet, J.L, Reversible and irreversible electrical switching in TeO2- V2O5 based glasses, Journal de Physique IV 2 (1992) C2-185 - C2-188.							
	CB4	Messoussi, R.; Bernede, J.C.; Benhida, S.; Abachi, T.; Latef, A., Electrical characterization of M/Se structures (M=Ni,Bi), Mat. Chem. And Phys. 28 (1991) 253-258.							
	CC4	Mitkova, M.; Boolchand, P., Microscopic origin of the glass forming tendency in chalcogenides and constraint theory, J. Non-Cryst. Solids 240 (1998) 1-21.							
	CD4	Mitkova, M.; Kozicki, M.N., Silver incorporation in Ge-Se glasses used in programmable metallization cell devices, J. Non-Cryst. Solids 299-302 (2002) 1023-1027.							
	CE4	Mitkova, M.; Wang, Y.; Boolchand, P., Dual chemical role of Ag as an additive in chalcogenide glasses, Phys. Rev. Lett. 83 (1999) 3848-3851.							
	CF4	Miyatani, Sy., Electronic and ionic conduction in (AgxCu1-x)2Se, J. Phys. Soc. Japan 34 (1973) 423-432.							
	CG4 CH4	Miyatani, Sy., Electrical properties of Ag2Se, J. Phys. Soc. Japan 13 (1958) 317.  Miyatani, Sy., Ionic conduction in beta-Ag2Te and beta-Ag2Se, Journal Phys. Soc. Japan 14							
	Cl4	(1959) 996-1002.  Mott, N.F., Conduction in glasses containing transition metal ions, J. Non-Cryst. Solids 1							
		(1968) 1-17.  Nakayama, K.; Kitagawa, T.; Ohmura, M.; Suzuki, M., Nonvolatile memory based on phase							
	CJ4	transitions in chalcogenide thin films, Jpn. J. Appl. Phys. 32 (1993) 564-569.							
	CK4	Nakayama, K.; Kojima, K.; Hayakawa, F.; Imai, Y.; Kitagawa, A.; Suzuki, M., Submicron nonvolatile memory cell based on reversible phase transition in chalcogenide glasses, Jpn. J. Appl. Phys. 39 (2000) 6157-6161.							
	CL4	Nang, T.T.; Okuda, M.; Matsushita, T.; Yokota, S.; Suzuki, A., Electrical and optical parameters of GexSe1-x amorphous thin films, Jap. J. App. Phys. 15 (1976) 849-853.							
	CM4	Narayanan, R.A.; Asokan, S.; Kumar, A., Evidence concerning the effect of topology on							

PTO/SB/08B (10-01)
Approved for use through 10/31/2002.OMB 0651-0031
U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE cond to a collection of information unless it contains a valid OMB control number.

Sut	ostitute for form 1449B/	РТО		Complete if Known		
-				Application Number	10/081,594	
١N	<b>NFORMATIO</b>	ON DI	SCLOSURE	Filing Date	February 20, 2002	
S	TATEMEN	T BY A	APPLICANT	First Named Inventor	Terry L. Gilton	
	.,			Group Art Unit	2818	
	(use as many	sheets as	necessary)	Examiner Name	Not Yet Assigned	
Sheet	7	of	8	Attorney Docket Number	M4065.0627/P627	

1114		electrical switching in chalcogenide network glasses, Phys. Rev. B 54 (1996) 4413-4415.
MC	CN4	Neale, R.G.; Aseltine, J.A., The application of amorphous materials to computer memories, IEEE transactions on electron dev. Ed-20 (1973) 195-209.
	CO4	Ovshinsky S.R.; Fritzsche, H., Reversible structural transformations in amorphous semiconductors for memory and logic, Mettalurgical transactions 2 (1971) 641-645.
	CP4	Ovshinsky, S.R., Reversible electrical switching phenomena in disordered structures, Phys. Rev. Lett. 21 (1968) 1450-1453.
	CQ4	Owen, A.E.; LeComber, P.G.; Sarrabayrouse, G.; Spear, W.E., New amorphous-silicon electrically programmable nonvolatile switching device, IEE Proc. 129 (1982) 51-54
	CR4	Owen, A.E.; Firth, A.P.; Ewen, P.J.S., Photo-induced structural and physico-chemical changes in amorphous chalcogenide semiconductors, Phil. Mag. B 52 (1985) 347-362.
	CS4	Owen, A.E.; Le Comber, P.G.; Hajto, J.; Rose, M.J.; Snell, A.J., Switching in amorphous devices, Int. J. Electronics 73 (1992) 897-906.
	CT4	Pearson, A.D.; Miller, C.E., Filamentary conduction in semiconducting glass diodes, App. Phys. Lett. 14 (1969) 280-282.
	CU4	Pinto, R.; Ramanathan, K.V., Electric field induced memory switching in thin films of the chalcogenide system Ge-As-Se, Appl. Phys. Lett. 19 (1971) 221-223.
	CV4	Popescu, C., The effect of local non-uniformities on thermal switching and high field behavior of structures with chalcogenide glasses, Solid-state electronics 18 (1975) 671-681.
	CW4	Popescu, C.; Croitoru, N., The contribution of the lateral thermal instability to the switching phenomenon, J. Non-Cryst. Solids 8-10 (1972) 531-537.
	CX4	Popov, A.I.; Geller, I.KH.; Shemetova, V.K., Memory and threshold switching effects in amorphous selenium, Phys. Stat. Sol. (a) 44 (1977) K71-K73.
	CY4	Prakash, S.; Asokan, S.; Ghare, D.B., Easily reversible memory switching in Ge-As-Te glasses, J. Phys. D: Appl. Phys. 29 (1996) 2004-2008.
	CZ4	Rahman, S.; Sivarama Sastry, G., Electronic switching in Ge-Bi-Se-Te glasses, Mat. Sci. and Eng. B12 (1992) 219-222.
	CA5	Ramesh, K.; Asokan, S.; Sangunni, K.S.; Gopal, E.S.R., Electrical Switching in germanium telluride glasses doped with Cu and Ag, Appl. Phys. A 69 (1999) 421-425.
	CB5	Rose,M.J.;Hajto,J.;Lecomber,P.G.;Gage,S.M.;Choi,W.K.;Snell,A.J.;Owen,A.E., Amorphous silicon analogue memory devices, J. Non-Cryst. Solids 115 (1989) 168-170.
	CC5	Rose,M.J.;Snell,A.J.;Lecomber,P.G.;Hajto,J.;Fitzgerald,A.G.;Owen,A.E., Aspects of non-volatility in a -Si:H memory devices, Mat. Res. Soc. Symp. Proc. V 258, 1992, 1075-1080.
	CD5	Schuocker, D.; Rieder, G., On the reliability of amorphous chalcogenide switching devices, J. Non-Cryst. Solids 29 (1978) 397-407.
	CE5	Sharma, A.K.; Singh, B., Electrical conductivity measurements of evaporated selenium films in vacuum, Proc. Indian Natn. Sci. Acad. 46, A, (1980) 362-368.
	CF5	Sharma, P., Structural, electrical and optical properties of silver selenide films, Ind. J. Of pure and applied phys. 35 (1997) 424-427.
	CG5	Snell, A.J.; Lecomber, P.G.; Hajto, J.; Rose, M.J.; Owen, A.E.; Osborne, I.L., Analogue memory effects in metal/a-Si:H/metal memory devices, J. Non-Cryst. Solids 137-138 (1991) 1257-1262.
	CH5	Snell, A.J.; Hajto, J.;Rose, M.J.; Osborne, L.S.; Holmes, A.; Owen, A.E.; Gibson, R.A.G., Analogue memory effects in metal/a-Si:H/metal thin film structures, Mat. Res. Soc. Symp. Proc. V 297, 1993, 1017-1021.
	CI5	Steventon, A.G., Microfilaments in amorphous chalcogenide memory devices, J. Phys. D: Appl. Phys. 8 (1975) L120-L122.
	CJ5	Steventon, A.G., The switching mechanisms in amorphous chalcogenide memory devices, J. Non-Cryst. Solids 21 (1976) 319-329.
	CK5	Stocker, H.J., Bulk and thin film switching and memory effects in semiconducting chalcogenide glasses, App. Phys. Lett. 15 (1969) 55-57

Sui	bstitute for form 1449B/PTC	)		Complete if Known		
30	balliate for form 1440B/1110			Application Number	10/081,594	
١١	NFORMATION	N DI	SCLOSURE	Filing Date	February 20, 2002	
S	TATEMENT I	BY A	APPLICANT	First Named Inventor	Terry L. Gilton	
				Group Art Unit	2818	
	(use as many sh	eets as	necessary)	Examiner Name	Not Yet Assigned	
Sheet	8	of	8	Attorney Docket Number	M4065.0627/P627	

UH	- CL5	Tanaka, K., Ionic and mixed conductions in Ag photodoping process, Mod. Phys. Lett B 4 (1990) 1373-1377.
	CM5	Tanaka, K.; Iizima, S.; Sugi, M.; Okada, Y.; Kikuchi, M., Thermal effects on switching phenomenon in chalcogenide amorphous semiconductors, Solid State Comm. 8 (1970) 387-389.
	CN5	Thornburg, D.D., Memory switching in a Type I amorphous chalcogenide, J. Elect. Mat. 2 (1973) 3-15.
	CO5	Thornburg, D.D., Memory switching in amorphous arsenic triselenide, J. Non-Cryst. Solids 11 (1972) 113-120.
	CP5	Thornburg, D.D.; White, R.M., Electric field enhanced phase separation and memory switching in amorphous arsenic triselenide, Journal(??) (1972) 4609-4612.
	CQ5	Tichy, L.; Ticha, H., Remark on the glass-forming ability in GexSe1-x and AsxSe1-x systems, J. Non-Cryst. Solids 261 (2000) 277-281.
	CR5	Titus, S.S.K.; Chatterjee, R.; Asokan, S., Electrical switching and short-range order in As-Te glasses, Phys. Rev. B 48 (1993) 14650-14652.
	CS5	Tranchant,S.;Peytavin,S.;Ribes,M.;Flank,A.M.;Dexpert,H.;Lagarde,J.P., Silver chalcogenide glasses Ag-Ge-Se: Ionic conduction and exafs structural investigation, Transport-structure relations in fast ion and mixed conductors Proceedings of the 6th Riso International symposium. 9-13 September 1985.
	CT5	Tregouet, Y.; Bernede, J.C., Silver movements in Ag2Te thin films: switching and memory effects, Thin Solid Films 57 (1979) 49-54.
	CU5	Uemura, O.; Kameda, Y.; Kokai, S.; Satow, T., Thermally induced crystallization of amorphous Ge0.4Se0.6, J. Non-Cryst. Solids 117-118 (1990) 219-221.
	CV5	Uttecht, R.; Stevenson, H.; Sie, C.H.; Griener, J.D.; Raghavan, K.S., Electric field induced filament formation in As-Te-Ge glass, J. Non-Cryst. Solids 2 (1970) 358-370.
	CD5	Viger, C.; Lefrancois, G.; Fleury, G., Anomalous behaviour of amorphous selenium films, J. Non-Cryst. Solids 33 (1976) 267-272.
	CX5	Vodenicharov, C.; Parvanov,S.; Petkov,P., Electrode-limited currents in the thin-film M-GeSe-M system, Mat. Chem. And Phys. 21 (1989) 447-454.
	CY5	Wang, SJ.; Misium, G.R.; Camp, J.C.; Chen, KL.; Tigelaar, H.L., High-performance Metal/silicide antifuse, IEEE electron dev. Lett. 13 (1992)471-472.
	CZ5	Weirauch, D.F., Threshold switching and thermal filaments in amorphous semiconductors, App. Phys. Lett. 16 (1970) 72-73.
	CA6	West, W.C.; Sieradzki, K.; Kardynal, B.; Kozicki, M.N., Equivalent circuit modeling of the Ag As0.24S0.36Ag0.40 Ag System prepared by photodissolution of Ag, J. Electrochem. Soc. 145 (1998) 2971-2974
	CB6	West, W.C., Electrically erasable non-volatile memory via electrochemical deposition of multifractal aggregates, Ph.D. Dissertation, ASU 1998
	CC6	Zhang, M.; Mancini, S.; Bresser, W.; Boolchand, P., Variation of glass transition temperature, Tg, with average coordination number, <m>, in network glasses: evidence of a threshold behavior in the slope  dTg/d<m>  at the rigidity percolation threshold (<m>=2.4), J. Non-Cryst. Solids 151 (1992) 149-154.</m></m></m>
I I		

Examiner Signature	11018	mon.	Date Considered	08	107

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.



PTO/SB/08A (10-01)

Approved for use through 10/31/2002.OMB 0651-0031

U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete if Known Substitute for form 1449A/PTO **Application Number** 10/081,594 INFORMATION DISCLOSURE Filing Date February 20,2002 STATEMENT BY APPLICANT First Named Inventor Terry L. Gilton 2818 Art Unit (use as many sheets as necessary) Connie C. Yoha Examiner Name 1 of 4 M4065.0726/P726 Sheet Attorney Docket Number

			U.S. PA	ATENT DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number  Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
MI	AA	6,469,364	10/2002	Kozicki	· Igureo / ppea/
1	AB	2002/0168820 App.	11/2002	Kozicki	
	AC	2002/0072188 App	6/2002	Gilton	1
	AD	2002/0123169 App	9/2002	Moore et al.	
	AE	2002/0123248 App.	9/2002	Moore et al.	
	AF	3,622,319	11/1971	Sharp	
	AG	3,743,847	7/1973	Boland	
	AH	4,269,935	5/1981	Masters et al.	
	ΑI	4,312,938	1/1982	Drexler, et al.	
	AJ	4,316,946	1/1982	Masters, et al.	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
	AK	4,320,191	3/1982	Yoshikawa et al.	
	AL	4,405,710	9/1983	Balasubramanyam et al.	1 1
	AM	4,419,421	12/1983	Wichelhaus, et al.	1 1
	AN	4,795,657	1/1989	Formigoni et al.	\ \ \
	AO	4,847,674	7/1989	Sliwa et al.	
	AP	4,499,557	2/1985	Holmberg et al.	1
<del>                                     </del>	AQ	5,177,567	1/1993	Klersy et al.	\ /
	AR	5,219,788	6/1993	Abernathey et al.	<del></del>
	AS	5,238,862	8/1993	Blalock et al.	1
	AT	5,315,131	5/1994	Kishimoto et al.	
	AU	5,350,484	9/1994	Gardner et al.	
	AV	5,360,981	11/1994	Owen et al.	1Λ
<del>. ]                                   </del>	AW	5,512,328	4/1996	Yoshimura et al.	<del>-                                     </del>
	AX	5,512,773	4/1996	Wolf et al.	<del></del>
	AY	5,726,083	3/1998	Takaishi	
	AA1	5,841,150	11/1998	Gonzalez et al.	<del>                                     </del>
		5,846,889	12/1998	Harbison et al.	
<del>                                     </del>		5.920.788	7/1999	Reinberg	<del>                                      </del>
		5,998,066	12/1999	Block et al.	
		6.077.729	6/2000	Harshfield	<del>                                     </del>
		6,117,720	9/2000	Harshfield	
		6,143,604	11/2000	Chiang et al.	<del>                                     </del>
		6,177,338	1/2001	Liaw et al.	
	Al1	6,236,059	5/2001	Wolstenholme et al.	<del></del>
	AJ1	6,297,170	10/2001	Gabriel et al.	
<del>    </del>		6,300,684	10/2001	Gonzalez et al.	<del>                                     </del>
	AL1	6,316,784	11/2001	Zahorik et al.	/
<del>                                     </del>		6,329,606	12/2001	Freyman et al.	<del></del>
		6,350,679	2/2002	McDaniel et al.	<del></del>
<del></del>		6,376,284	4/2002	Gonzalez et al.	<del>-                                     </del>
<del>                                     </del>		6,391,688	5/2002	Gonzalez et al.	<del></del>
<del></del>		6,414,376	7/2002	Thakur et al.	/
1		6,423,628	7/2002	Li et al.	
	AS1	6,487,106	11/26/2002	Kozicki	
1	AT1	5,314,772	5/24/1994	Kozicki	1/
		0,017,772	JIZ41 1334	INUZIONI	



Su	bstitute for form 1449A/PTO			Complete if Known		
-				Application Number	10/081,594	
	NFORMATION	1 DI	SCLOSURE	Filing Date	February 20,2002	
9	STATEMENT	3Y /	APPLICANT	First Named Inventor	Terry L. Gilton	
				Art Unit	2818	
	(use as many sh	eets as	necessary)	Examiner Name	Connie C. Yoha	
Sheet	2	of	4	Attorney Docket Number	M4065.0726/P726	

1 /	Jk:	AU1	2002/0190350 APP	12/19/2002	Kozicki	$ \nabla$
		AV1	2003/0027416 APP	2/6/2003	Moore	
		AW1	2003/0001229 APP	1/2/2003	Moore et al.	
		AX1	2002/0106849 APP	8/8/2002	Moore	
		AY1	2002/0127886 APP	9/12/2002	Moore et al.	
		AZ1	2002/0123170 APP	9/5/2002	Moore et al.	
٠.		BA1	2002/0163828 APP	11/2002	Krieger et al	
		BB1	6,072,716	6/2000	Jacobson et al.	
	1	BC1	5,272,359	12/93	Nagasubramanian et al.	
		BD1	4,671,618	6/87	Wu et al.	
		BE1	4,800,526	1/89	Lewis	
		BF1	2003/0035314	02/20/03	Kozicki	
		BG1	2003/0035315	02/20/03	Kozicki	
		BH1	6,473,332 10/2005	04/04/01	Ignatiev et al.	





PTO/SB/08A (10-01)
Approved for use through 10/31/2002.OMB 0651-0031
U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO		4	Complete if Known			
				Application Number	10/081,594	
١N	<b>NFORMATION</b>	1 DI	SCLOSURE	Filing Date	February 20,2002	
S	TATEMENT B	3Y /	APPLICANT	First Named Inventor	Terry L. Gilton	
				Art Unit	2818	
	(use as many she	eets as	necessary)	Examiner Name	Connie C. Yoha	
Sheet	3	of	4	Attorney Docket Number	M4065.0726/P726	

		FOREI	GN PATENT	DOCUMENTS	
Examiner Initials*	Cite	Foreign Patent Document	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant
	No.1	Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	MM-DD-YYYY	Applicant of Cited Document	Passages or Relevant Figures Appear
Max	BA	JP 56126916	10/1981	Akira et al.	-
/	ВВ	-			
					_
Examine	r I /		:	Date	1/2

Considered

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant

<sup>&</sup>lt;sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See attached Kinds Codes of USPTO Patent Documents at <a href="www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the application number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>5</sup> Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449A/PTO		Complete if Known				
				Application Number	10/081,594	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT			SCLOSURE	Filing Date	February 20,2002  Terry L. Gilton	
			APPLICANT	First Named Inventor		
				Art Unit	2818	
(use as many sheets as necessary)				Examiner Name	Connie C. Yoha	
Sheet	4	M4	4 .	Attorney Docket Number	M4065.0726/P726	

	T.	OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS						
Examiner nitials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issue number(s), publisher, city and/or country where published.						
MX	CA	Axon Technologies Corporation, TECHNOLOGY DESCRIPTION: <i>Programmable Metalization Cell(PMC)</i> , pp. 1-6 (Pre-May 2000).						
Í	СВ	Helbert et al., Intralevel hybrid resist process with submicron capability, SPIE Vol. 333 SUBMICRON LITHOGRAPHY, pp. 24-29 (1982).						
	СС	Hilt, DISSERTATION: Materials characterization of Silver Chalcogenide Programmable Metalization Cells, Arizona State University, pp. Title page-114 (UMI Company, May 1999).						
	CD	Hirose et al., High Speed Memory Behavior and Reliability of an Amorphous As <sub>2</sub> S <sub>3</sub> Film Doped Ag, PHYS. STAT. Sol. (a) 61, pp. 87-90 (1980).						
	CE	Holmquist et al., Reaction and Diffusion in Silver-Arsenic Chalcogenide Glass Systems, 62 J. AMER. CERAM. Soc., No. 3-4, pp. 183-188 (March-April 1979).						
	CF	Huggett et al., Development of silver sensitized germanium selenide photoresist by reactive sputter etching in SF <sub>6</sub> , 42 APPL. PHYS. LETT., No. 7, pp. 592-594 (April 1983).						
	CG	Kawaguchi et al., Mechanism of photosurface deposition, 164-166 J. Non-CRYST. SOLIDS, pp. 1231-1234 (1993).						
	СН	Kolobov and Elliott, Photodoping of Amorphous Chalcogenides by Metals, Advances in Physics, Vol. 40, No 5, 625-684 (1991).						
	CI	Kozicki, et al., "Applications of Programmable Resistance Changes in Metal-doped Chalcogenides", Proceedings of the 1999 Symposium on Solid State Ionic Devices, Editors - E.D. Wachsman et al., The Electrochemical Society, Inc., 1 - 12 (1999).						
	CJ	Kozicki, et al., Nanoscale effects in devices based on chalcogenide solid solutions, Superlattices and Microstructures, 27, 485-488 (2000).						
)	CK	Kozicki, et al., Nanoscale phase separation in Ag-Ge-Se glasses, Microelectronic Engineering, vol. 63/1-3,155-159 (2002).						
	CL	M.N. Kozicki and M. Mitkova, Silver incorporation in thin films of selenium rich Ge-Se glasses, Proceedings of the XIX International Congress on Glass, Society for Glass Technology, 226-227 (2001).						
	СМ	McHardy et al., The dissolution of metals in amorphous chalcogenides and the effects o electron and ultraviolet radiation, 20 J. Phys. C.: SOLID STATE Phys., pp. 4055-4075 (1987)f						
	CN	Owen et al., Metal-Chalcogenide Photoresists for High Resolution Lithography and Sub-Micron Structures, NANOSTRUCTURE PHYSICS AND FABRICATION, pp. 447-451 (M. Reed ed. 1989).						
	со	Shimizu et al., The Photo-Erasable Memory Switching Effect of Ag Photo-Doped Chalcogenide Glasses, 46 B. CHEM SOC. JAPAN, No. 12, pp. 3662-3365 (1973).						
	CP							
	CQ							
	,		-					
			Γ					

Examiner Signature	Means	workers	Date Considered	08/03	
	10,				_

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.